

## SECTOR ASSESSMENT (SUMMARY): WATER AND OTHER INFRASTRUCTURE AND SERVICES

### Sector Road Map

#### 1. Sector Performance, Problems, and Opportunities

1. During 2011–2019, the Government of Georgia attracted more than \$800 million of financial assistance for urban water supply and sanitation (WSS), which enabled it to reduce infrastructure deficiencies, especially in wastewater treatment, and incrementally build the capacity of United Water Supply Company of Georgia (UWSCG). But several challenges remain.<sup>1</sup>

2. **Reform progression.** When Georgia became independent in 1991, the country's WSS system was in poor condition. The government implemented several reforms and in 2003 established the Western Water Company and the Eastern Water Company, transferring the responsibilities for WSS from local governments to them. Tbilisi, the capital, and the adjacent cities of Gardabani, Mtskheta, and Rustavi were served by four independent water companies, which in 2008 were merged and privatized to form Georgian Water and Power (GWP). By 2009, an additional 66 WSS companies had been merged into three companies: East, West, and Adjara Water. In 2010, the government consolidated East and West Water and formed the UWSCG. Adjara Water Company, which operated in the autonomous region of Adjara, was renamed Batumi Water Company (BWC).

3. As of August 2020, nine service providers, known as licensees, cover 56% of Georgia's population, while 44% of largely rural residents are serviced by local government units. The three largest companies cover 92% of the urban population: (i) privately owned GWP, which provides services in Tbilisi and surroundings; (ii) BWC, owned and managed by the municipal government of Adjara; and (iii) state-owned UWSCG, which operates in 10 regions. As the sole state-owned enterprise (SOE) in the sector, UWSCG has the largest share of infrastructure assets (Table 1) and the scale to have a positive impact on sector development and growth.<sup>2</sup>

4. The sector requires substantial investments, estimated at \$100 million per annum,<sup>3</sup> to upgrade and maintain the systems, improve the quality of water, reduce coverage gaps in rural areas, expand wastewater treatment capacity, and align sector performance with EU standards. Financing the planned sector development will be a major challenge given coronavirus disease (COVID-19) and the government's subsidy reduction initiative. Improvements are most acutely needed at UWSCG—its nonrevenue water (NRW) rate exceeds 70%, and its performance and capacity levels are declining. As regards rural WSS, local governments have insufficient technical and financial resources to properly manage it.

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<sup>1</sup> The program covers two sectors: (i) water and other urban infrastructure services, and (i) agriculture, natural resources, and rural development. Urban policy, institutional and capacity development and urban water supply are subsectors of the first sector, while rural water policy, institutional and capacity development is a subsector of the second. This summary is based on the detailed sector assessment, which is available on request.

<sup>2</sup> UWSCG's average duration of water supply is 16.4 hours per day, while other licensees achieve 21.6 hours per day.

<sup>3</sup> MRDI and UWSCG estimates prior to COVID-19. Spending by the donors and the government was \$65 million in 2017, \$80 million in 2018, and \$100 million in 2019.

**Table 1: Infrastructure Assets of Three Utilities**

Utility	Water Supply Assets					Wastewater Assets		
	Water Intakes	Production (no. of WTPs)	Storage (m <sup>3</sup> )	Pumping Stations	Network (km)	Collection Network (km)	Pumping Stations	WWTP
GWP	1 underground 2 surfaces	2	320,000	141	3,600	1,600	N/A	1 WWTP (1,000,000 m <sup>3</sup> /day)
UWSCG	289 tubewells 19 surfaces	19	175,000	166	5,189	1,098	N/A	N/A (not functional) – over 20 under construction and planned
BWC	2 surfaces	2	20,000	N/A	N/A	N/A	12	1 WWTP (30,000 m <sup>3</sup> /day)
<b>Total</b>			515,000		8,789	2,698	-	-

BWC = Batumi Water Company, GWP = Georgian Water and Power, km = kilometer, m<sup>3</sup> = cubic meter, N/A = not available, UWSCG = United Water Supply Company of Georgia, WTP = water treatment plant, WWTP = wastewater treatment plant.

Source: Asian Development Bank estimates.

5. **Enabling environment.** Four main bodies regulate the sector: the Ministry of Regional Development and Infrastructure (MRDI) is responsible for policy formulation, infrastructure development, and administration of line agencies such as UWSCG; the Ministry of Environment Protection and Agriculture is tasked with environmental regulation; the Ministry of Labor, Health, and Social Affairs monitors the quality of drinking water; and the Georgian National Energy and Water Supply Regulatory Commission (GNERC) regulates sector operators and sets the tariffs.<sup>4</sup> Key areas for improvement are the overlapping roles and responsibilities of the MRDI and UWSCG, and deficient performance requirements and incentives. The institutional framework lacked a consolidated WSS policy and coordination for sector planning, development, and monitoring.<sup>5</sup> The current tariff is skewed in favor of residential consumers and is subsidized by commercial consumers. The revenue from commercial customers represents nearly 75% of total revenue. As a consequence, commercial customers increasingly opt for alternative sources of water supply. GNERC plans to reduce this cross-subsidization through a rationalized tariff structure.

6. **Performance of two largest utilities.** GWP and UWSCG took over obsolete infrastructure when the smaller utilities were consolidated. GWP provides services in densely populated Tbilisi, while UWSCG's service area stretches across 10 regions with low population density, which drives up operating costs. GWP runs three hydropower plants, and sources its own electricity, so despite having old infrastructure, it has been able to generate profits. GWP underperforms in terms of system leakage and metering levels, but outperforms UWSCG in staff productivity and energy efficiency (Table 2). With support from international finance institutions, UWSCG was able to access low-cost financing and had the means to support the sector's infrastructure needs (Table 3). UWSCG has more than 60 ongoing and planned projects, including an ADB-funded \$500 million multitranche financing facility (MFF) in 2020.<sup>6</sup> It has built up significant debt to cover large capital programs. The COVID-19 has hurt its financial position, and it expects a revenue loss of up to 30% in 2020. UWSCG has a significant room for efficiency improvements. As it stands, the government supports the inefficient operations of UWSCG with

<sup>4</sup> GNERC's independence is guaranteed by a legally mandated, self-sufficient revenue stream, funded by fees paid by the licensees.

<sup>5</sup> Rural WSS suffers from the absence of a holistic solution of its challenges, and local governments have insufficient technical and financial resources to properly manage it.

<sup>6</sup> ADB. 2011. *Georgia: Urban Services Improvement Investment Program*. Manila.

various direct and indirect subsidies but its service standards remain deficient, which underscores the need to reduce government subsidies for SOEs.

**Table 2: Performance comparison – United Water Supply Company of Georgia and Georgian Water and Power LLC**

Key indicators	UWSCG	GWP
Population (million)	0.9	1.1
Assets (GEL million)	999	495
Operating ratio	1.45	0.6
Employees	2,700	2,800
Staff productivity (no. of staff per 1000 connections)	8	4
Metering level (%)	57	32
Nonrevenue water (%)	77	67
Infrastructure Leakage Index	43	79
Energy efficiency (kWh/m <sup>3</sup> )	0.8	0.45

GEL = lari, Georgia's currency; GWP = Georgian Water and Power LLC; kWh/m<sup>3</sup> = kilowatt-hours per cubic meter; UWSCG = United Water Supply Company of Georgia.

Source: Asian Development Bank estimates.

**Table 3: Operational Overview of United Water Supply Company of Georgia, 2019**

Key indicators	Unit	Value
Access to piped water	% population	79.5
Access to stand posts	% population	58.6
Access to wells/boreholes	% population	84.8
Access to septic tanks	% population	67.1
Domestic water consumption <sup>a</sup>	liter/capita/day	188.3
Revenue collection	% sales	98
Cost recovery	% total costs	69
Residential tariff	US¢/m <sup>3</sup>	13.5
Commercial tariff	US¢/m <sup>3</sup>	108.9

¢ = cent, m<sup>3</sup> = cubic meter, US = United States.

<sup>a</sup> Average domestic water supply per capital per day is based on the utility's residential connections and excludes unconnected customers.

Source: United Water Supply Company of Georgia.

## 2. Government's Sector Strategy

7. The Socio-Economic Development Strategy of Georgia (Georgia 2020) sets the overall strategic objectives for the provision of continuous water supply, rehabilitation of drainage systems, and wastewater treatment for the Georgian population.<sup>7</sup> The cross-sector Regional Development Program of Georgia 2018–2021 includes a measure for the development of water, sewerage, and wastewater infrastructure, excluding the autonomous region of Adjara and Tbilisi.<sup>8</sup> With assistance from the Asian Development Bank (ADB), the government also prepared an urban WSS development plan for 2011–2020 to tackle the problems and constraints prevalent in urban WSS.<sup>9</sup> Some of the pending policy and institutional targets are on track to be met as part of the government policy reforms in the sector in 2020 and 2021. The government is preparing a new consolidated WSS vision and policy, as well as the updated and expanded targets for the WSS framework 2021–2030. The investment targets outlined in the plan have been substantially met. The government requested additional support for operational efficiency improvements in

<sup>7</sup> Government of Georgia. 2014. *Socio-Economic Development Strategy of Georgia (Georgia 2020)*. Tbilisi.

<sup>8</sup> Government of Georgia. 2018. *Regional Development Program of Georgia 2018–2021*. Tbilisi.

<sup>9</sup> ADB. 2010. *Technical Assistance to Georgia for Developing an Urban Water Supply and Sanitation Sector Strategy and Regulatory Framework*. Manila.

UWSCG, preparation for rural WSS development, and upgrade the water supply system in Telavi, the regional center of Kakheti, 158 kilometers from Tbilisi, and the 13th largest city in Georgia.<sup>10</sup> It is economically and strategically important for tourism, agribusiness, and wine production, and is identified as a priority city in the Regional Development Program of Georgia (footnote 8).

8. The government's WSS reforms are anchored in the planned new law on water resources management to be aligned with European Union (EU) legislation, the 2020–2025 decentralization strategy, and the planned reform of SOEs that is being discussed with the International Monetary Fund.<sup>11</sup> The government plans to incorporate the EU Water Framework Directive in a new law on water resources management that embraces EU water quality standards and an overall integrated approach to water management. The 2020–2025 decentralization strategy devolves more power to local governments, which precipitates the need for a feasible institutional framework for rural WSS development and management.

9. **State-owned enterprise reform and public–private partnerships.** The government initiated SOE reforms in 2020 for a faster post-COVID-19 recovery and increased macroeconomic stability.<sup>12</sup> The Ministry of Finance (MOF) selected UWSCG to be one of the first SOEs to implement the national reforms to transform UWSCG into a more efficient SOE and will use it to model SOE reforms. MOF wishes to capture the advantages of private sector engagement for government subsidy reduction and quality services. However, UWSCG covers cities with low population density and tariff level, which are not attractive to the private sector. The government will pave the way for greater PSP and PPP opportunities by making UWSCG's operational data more reliable, and improving its operational performance. The government considers UWSCG a strategic asset to meet its socioeconomic goals, and sees sector reforms as a prerequisite for a next generation of physical investments. The government support for UWSCG reforms are based on the following reasons: (i) UWSCG functions as a key conduit for channeling development funds for WSS to meet the government's Sustainable Development Goals and protect the Georgian population from the spread of COVID-19; (ii) the preconditions to private sector participation (PSP) and public–private partnership (PPP) projects are not met mainly from lack of operational data, perceived high regulatory and tariff risks; and (iii) GWP and Armenia experience showed that gradual approach is better for successful private sector engagement.<sup>13</sup> UWSCG will explore optimal ways to engage with the private sector, starting with outsourcing and performance-based management contracts and progressively transitioning to expanded PPP through careful planning and implementation. UWSCG will prepare a road map that sets out options for introducing contract-based PSP/PPPs over time, and a plan for the PSP/PPP project pipeline development and tendering to procure a commercially viable PSP/PPP transaction.

### 3. ADB Sector Experience and Assistance Program

10. Since 2007, ADB has made 18 commitments to water and urban operations in Georgia totaling \$593 million in grants, loans, and technical assistance. Its operations are anchored in

<sup>10</sup> Telavi suffers from inadequate water supply—intermittent and totaling just 4 hours per day on average—and only 40% of households are metered.

<sup>11</sup> European Union. 2000. [\*Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy\*](#). Brussels; Government of Georgia. 2020. *Decentralization Strategy 2020–2025*. Tbilisi.

<sup>12</sup> The Ministry of Finance (MOF) plans to complete its fiscal analysis of all SOEs by the second half of 2021, publicly disclose all government subsidies by 2022, and request SOEs to prepare a subsidy reduction plan for 2023.

<sup>13</sup> Armenia's water PPPs entailed five water PPP contracts (successive management and lease contracts) implemented since 2000, and did not involve the sale of assets, while Georgia divested assets that are now owned by GWP. In contrast to management, lease, and concession contracts, with divestiture it is difficult to change modalities and influence performance, except through regulation.

Georgia's national development agenda as laid out in its 2016 Four-Point Action Plan, and support the key strategic pillars of ADB's country partnership strategy, 2019–2023 for Georgia and its Strategy 2030 (balanced economic development, livable cities, poverty reduction, rural development, governance and institutions).<sup>14</sup>

11. ADB is the lead development partner in the sector and provided a \$500 million loan under the Urban Services Improvement Investment Program. Its assistance in 12 cities has reduced infrastructure deficiencies, especially in wastewater treatment, and incrementally built the capacity of UWSCG.<sup>15</sup> ADB and the government are now preparing the proposed sector development program (SDP) with loans totaling \$150 million—a \$130 million policy-based loan (PBL) and a \$20 million project loan.

12. High-level policy support for the WSS and SOE reforms will include, but are not limited to: (i) a single WSS policy to drive sector reform, including to meet the needs of rural WSS; (ii) UWSCG restructuring, as well as strategy and human resources reforms; (iii) rationalized tariffs; and (iv) the use of PSP, PPPs, and technology as change agents to accelerate institutional transformation. The project components are linked to effectively operationalize policy reforms envisaged under the SDP. The project will strengthen the O&M capacity of UWSCG and procure modern O&M equipment, prepare for national-scale rural WSS development, upgrade the Telavi water supply system, and increase public awareness of infection prevention and hygiene in the context of COVID-19.

13. The project design takes into account the constraints in UWSCG's institutional and implementation capacity to undertake additional works. Some of the essential O&M equipment has been advanced and is procured under the ongoing MFF.<sup>16</sup> Remaining works under the ongoing MFF works (8 contracts with an estimated undisbursed amount of \$87 million at the end of March 2021) were also reflected in scoping the project design. Considering the volume of the ADB's ongoing investment portfolio, the distribution of the PBL and project loan amount is balanced and corresponds to the government's development financing and reform needs. The SDP also comes with attached technical assistance to support the implementation of an advanced asset management system for water supply in select cities.

14. The SDP is included in ADB's country operations business plan, 2020–2022.<sup>17</sup> The SDP complements ADB's ongoing sector operations in Georgia and will increase the sustainability of corresponding infrastructure and the efficiency of service delivery. Significant improvements of the government's fiscal space are also expected as a result of policy changes and actions required under the SDP. It will prepare and pave the way for greater PSP/PPP opportunities. This will be done by making UWSCG's operational data more reliable and transparent, improving its operational performance, helping secure support from stakeholders, and contributing to the utility's restructuring as well as the enabling environment.

<sup>14</sup> Government of Georgia. 2016. *Freedom, Rapid Development, Prosperity-Government Program 2016–2020 (Four-Point Action Plan)*. Tbilisi; ADB. 2019. *Country Partnership Strategy: Georgia, 2019–2023—Developing Caucasus's Gateway to the World*. Manila; and ADB. 2018. *Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific*. Manila.

<sup>15</sup> Upon completion of the MFF, the 12 MFF-supported cities will have less than 30% NRW, 24-hour water supply, and the first biologically treated wastewater in the country (11 wastewater treatment plants).

<sup>16</sup> Installation of bulk meters and procurement of O&M equipment have been supported under the ongoing MFF.

## PROBLEM TREE FOR WATER AND OTHER INFRASTRUCTURE AND SERVICES

